10

15

20

25

<u>Claims</u>

- 1. A method for collecting animals living on or in a water bottom, such as crustaceans and shellfish and fish, wherein a collecting device is moved over the bottom, which collecting device is provided with means for moving the animals from or off the water bottom, in particular at least one tine that can penetrate into the bottom and with which said animals can be taken or forced from or off the bottom, while said at least one tine is provided with fluid outlet means through which, under pressure, a fluid, in particular water is forced into the bottom, such that a top layer of the bottom is stirred up and animals living therein or thereon are dislodged, which animals are caught in the collecting device.
- 2. A method according to claim 1, wherein the collecting device is moved in a first direction over the bottom and the fluid is forced into the bottom in approximately the same direction.
- 3. A method according to claim 1 or 2, wherein the fluid is introduced into the bottom less than 25 cm, more particularly less than 10 cm and preferably between 0 and 7 cm below the surface of the bottom.
- 4. A method according to any one of the preceding claims, wherein, viewed in said first direction, in front of the at least one tine, detection means are provided with which the presence of animals in or on the bottom is detected, while operating means are provided for moving the at least one tine, which are activated on the basis of signals of said detecting means, the arrangement being such that the at least one tine is only moved into the bottom when the detecting means in front of the respective tine detect the presence of animals in or on the bottom, and is moved from the bottom again when no more animals are detected in front of the respective tine.
- 5. A method according to any one of the preceding claims, wherein, viewed in said first direction, in front of the at least one tine, detecting means

5

15

20

are provided with which the presence of animals in or on the bottom is detected, while operating means are provided for controlling electric means arranged near the times, for generating current impulses and/or an electric and/or magnetic field, which means are activated on the basis of signals of said detecting means, the arrangement being such that said electric mean are only activated when the detecting means in front of the respective tine detect the presence of animals in or on the bottom and are moved from the bottom again when no more animals are detected in front of the respective tine.

- A method according to any one of the preceding claims, wherein the 6. animals are detected with the aid of sound, in particular ultrasonic sound 10 measurement.
 - A method according to any one of the preceding claims, wherein 7. cockles or like shellfish or crustaceans are pushed from the bottom with the aid of the at least one tine and are then discharged upwards to a collecting means on a craft.
 - A method according to any one of the preceding claims, wherein fish 8. are chased from the bottom and are caught in a net, cage or like capturing means.
 - A device for collecting animals living in or on the water bottom, 9. provided with:
 - supporting means for support on a water bottom;
 - detecting means for detecting animals in or on the water bottom; and
- means for moving the animals from of off the water bottom, drivable on the basis of a signal to be delivered by the detecting means. 25
 - A device according to claim 9, wherein the means for moving the 10. animals from of off the water bottom comprise at least one tine which, during use, can extend below a plane defined by the undersides of the supporting means, at least into the bottom, and water supply means for, during use,
- introducing water under pressure into the bottom, at most at a gentle angle 30

5

15

20

relative to and preferably approximately parallel to said plane, at least to a bottom over which the device can be moved.

- 11. A device according to claim 10, wherein a row of tines is provided.
- 12. A device according to claim 10 or 11, wherein means are provided for moving the or each tine between a first position in which the respective tine extends, during use, at least partly into the bottom, and a second position in which the respective tine extends at least partly and preferably wholly above the bottom.
- 13. A device according to any one of claims 10 12, wherein the or each time is provided with a free end extending, at least in a position of use, in particular in the first position, approximately parallel to said plane, at least the top side of the water bottom, while the water supply means are arranged for introducing water approximately parallel to this free end.
 - 14. A device according to any one of claims 9 13, wherein the means for moving the animals from of off the water bottom comprise electric or mechanical means for generating a current surge and/or a magnetic and/or electric field and/or a vibration field.
 - 15. A device according to claim 14, wherein a series of electric means is provided, as well as a series of detecting means, such that over a relatively large width animals can be detected, at different positions in front of the device and, depending thereon, different electric means in the series can be operated.
- 16. A device according to claims 9 15 and a craft, wherein the device is at least connected to the craft by a flexible hose or tube through which water can be guided to the device and/or animals can be moved from the device to the craft.